

CLAIMS

Claim 1. A surface abrasion handpiece adapted for use to abrade skin of a patient, comprising:

a housing extending along an axis between a proximal end and a distal end;

portions of the housing defining a hole at the distal end of the housing;

5 an abrasion element disposed in the housing in proximity to the hole;

the housing being adapted for connection to a vacuum source to pull a portion of the skin through the hole and to move the skin portion into contact with the abrasion element; whereby

10 movement of the abrader relative to the skin abrades tissue from the skin portion extending through the hole.

Claim 2. The handpiece recited in Claim 1 wherein the abrader includes an abrasive surface disposed relative to the hole.

15 Claim 3. The handpiece recited in Claim 2 wherein the abrader includes:  
a disc having a generally planer outer surface; and  
the abrasive surface is formed on the outer surface of the disc.

Claim 4. The handpiece recited in Claim 2, wherein:  
20 the abrader includes a roller having a generally cylindrical outer surface; and  
the abrasive surface forms the outer surface of the roller.

Claim 5. The handpiece recited in Claim 1, wherein the abrader includes a blade disposed in proximity to the hole, the blade being movable relative to the housing.

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Claim 6. The handpiece recited in Claim 5, wherein:

the blade is moveable between a first position and a second position;

the blade in the first position being adapted for scraping the skin with movement of the housing in a first direction; and

30 the blade in the second position being adapted for scraping the skin with movement of the housing in a second direction opposed to the first direction.

Claim 7. The handpiece recited in Claim 6, wherein the blade is pivotal relative to the housing between the first position and the second position.

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Claim 8. A method for abrading skin of a patient, comprising the steps of:

providing a hand piece with a hole;

moving a portion of the skin through the hole and into the handpiece; and

abrading the skin portion moved through the hole of the handpiece.

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Claim 9. The method of abrading skin recited in Claim 8, further comprising the step of:

providing an abrasive surface in proximity to the hole in the housing; and

moving the skin relative to the abrasive surface to abrade the skin portion.

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Claim 10. The method recited in Claim 9, wherein the moving step includes the steps of:

moving the abrasive surface relative to the skin to abrade the skin portion extending through the hole.

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Claim 11. The method recited in Claim 10 wherein the step of moving the abrasive surface relative to the skin includes a step of moving the housing relative to the skin.

55 Claim 12. The method recited in Claim 8 where the abrading step includes the steps of:

providing an abrader in the housing;

moving the handpiece over the skin to draw successive portions of the skin through the hole and into abrasive contact with the abrader.

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Claim 13. The method recited in Claim 10 wherein the step of moving the abrasive surface includes the step of moving the abrasive surface relative to the housing.

Claim 14. The method recited in Claim 13 wherein the step of moving the  
65 abrasive surface relative to the housing includes the step of rotating the abrasive surface relative to the housing.

Claim 15. The method recited in Claim 13 wherein the step of moving the  
abrasive surface relative to the housing includes the step of oscillating the abrasive surface  
70 relative to the housing.

Claim 16. The method recited in Claim 8 wherein the moving step includes the  
step of drawing the skin portion into the hole.

75 Claim 17. The method recited in Claim 16 wherein the drawing step includes the  
step of sucking the skin portion into the hole.

Claim 18. A method for operating a skin abrader, including the steps of:  
providing a housing with a base and a cap separable to provide access to an  
80 abrasion element within the housing;  
providing a series of abrasion elements each having different abrasion  
characteristics;

selecting from this series a particular one of the abrasion elements having the  
abrasion characteristics desired;

85 removing the cap from the base;  
mounting the particular abrasion element in one of the caps and the base; and  
replacing the cap on the base with the particular abrasion element disposed in the  
housing.